Is Our Solar System Dying

Prof. Garren P. Serviss.

spectroscope and the telescope happens with the star Algol, and as it re- vast extent of darkness in the heavens. The I have long thought that the explanation moon capable of conveying them. yond five million years, while its past is eclipses, recurring at regular intervals, fur- crowded suns and sun measured by twenty or thirty million years at nish a means, combined with others, of esti- clusters, which encirleast. With the perishing of the sun will mating the size and the speed of the myste- cles he whole heavens

come the death of its system of planets, rious black orb which causes them,

in the depths of surroundling space—what of tinually increasing.

not yet reached the perio of middle life. But inc.

When the fire on the hearth has gone out, Again, a dark body manifests its presence jewels, black gaps exthe chill of Winter and the silence of extinc- near a star only through the effects of its at- ist, revealing only traction, pulling its neighbor this way and glimpses of rayless We turn from the sun and the earth, both that as they swing around their common gloom beyond, like wininsignificant in the great scheme of the uni- centre, sometimes with terrific velocity, like dows opening out of a verse, to inquire what are, the prospects be- gigantic wrestlers in a ring. The known brilliantly illuminated youd. The sun has millions, and even hun- number of these invisible bodies-dead suns, hall into a night whose dreds of millions, of brot her suns, glittering solar skeletons, we might call them-is con-darkness is accentuated

them;? Are they also fast approaching ex- Counting these extinguished orbs with What is the meaning tinction, or is it otherwise with them? The which space seems to be populous we must of this? Does the unispectroscope again enable s us to give an an- look upon the starry heavens as being at verse end there? How, swer. More than half of the visible stars, as least middle aged, if not, indeed, like our own then, can we call it a far as investigation has yet gone, are ap- system, on the downward course. The com- universe? It is rather parently younger in development than our paratively small number of the nebulac, only a subordinate syssun. He belongs to a solar generation which which may be regarded as the germs of fu- tem included within the is ripening toward its end; they to a younger ture suns, adds probability to this view. In universe, The human brood which may not yet have attained the brief, then, the indications of astronomy are mind can conceive no that the system of stars which we ordinarily limit to space, for the

noon mark of its existence. The in the near neighborhood of a bright star, as most puzzling mysteries of astronomy is the most limits of the visible universe?

unite in testifying that it is on volves around its brilliant neighbor it inter- visible stars are only scattered points in the limitation of the luminiferous go all the tremendous uproar of the sun, briefly considered. In that view all space is the downhill side of solar life. Its cepts for a little while the light coming to universal gloom. Even in the richest places ether. Science believes that the light of the when it is tossed and tormented with those to be regarded as a single drop of the ether future history may not extend be- our eyes and produces a partial eclipse. These of the Milky Way, that marvellous galaxy of sun and the stars is conveyed to our eyes by gigantic whirlings and upheavals that pro- filled with gleaming motes, as Fitz James

As far as this evidence goes then, it would call the universe is moving toward extinction, instant that you imagine an end-a wall of stars, exist?

is still on the rising curv , and, perhaps, has than are born out of yet undeveloped nebu- something beyond that wall, something fur- thought clear. An atmosphere is necessary truly exclain with Jean Paul Richter, "End every one that perished or parted with its ther than that fancled end. there is a something else which is of ominous. This, however, is not all. True, the great. This being so, what lies beyond the system conveyed from place to place. We hear there is no beginning."

import. Every day we re learning more telescopes of modern times seem to have of the stars? What mysteries and what un- sounds originating on the earth because the The alternative to all this, viz., that the would flit the glorious spirit of life without about the dark and in sible bodies with nearly reached the bottom in their soundings dreamed of splendors are hidden by the wall air conveys them to our ears; but we can-blackness of outer space may simply indicate end.

an imponderable and in- duca the sunspots, are inaudible on the earth O'Brien, in his beautiful story of the "Dinvisible medium called for lack of a medium to convey the waves mond Lens," beheld an infinite world of bright the ether. It extends of sound. Cut off the luminiferous ether be- creations in his illuminated drop of water. unbroken throughout all tween the earth and the moon, or the earth The on-coming of the spirit of death, the the space occupied by and the sun, and those bodies would be in- gradual extinction of suns and the perishing the stars. But does visible to us; we should never dream of their of worlds in such a system would resemble it extend beyond the existence.

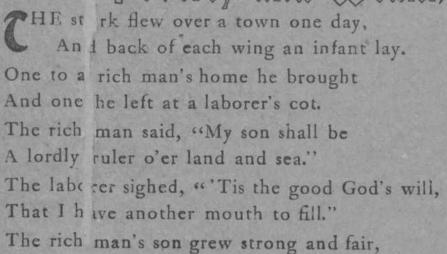
visible stars? May not that drop of ether, if I which, like a transparent drop, encloses the sphere of the milky way. The fact that we pression, in which our cannot see them does not prove that they system is contained have no existence. On the other hand, the have its limits, its impossibility of imagining a limit to space, bounds ries, at the disboundaries, at the dis- and the improbability that infinite space out- God's creation rather than the other which tance where the reside our visible system is aitogether waste. I have suggested, science, perhaps, cannot be visible? May there beyond our star-filled drop of ether there are none of it. It is too shocking to every better not be a gap, an emptiness, there beyond our star-med drop of the drops, separated from one another by instinct of our being. Rather let us believe expanses free from the medium that bears that, if we could look upon the universe with containing its universe

appear that the starry universe, as a whole, and that more suns will perish in the future closing space in—you cannot help thinking of The analogy of sound may make this zon of our minds expanded! Then we may shower falling through sunshine, and for in order that the waves of sound may be is there none to the universe of God! Lo! also splender a new one coming into sight, while

slowly advancing toward the centre, must be the terrible advance of desiceation watched furthest limit of the Just so with starry systems existing be- by the nero of the dried away under his microscope; and the

which other drops or light, and consequently invisible the one from omnipresent vision, we should behold, spread infinitely on every side, the starry drops of Accepting this view, how vestly is the horl- systems without number, all glittering like a through the sparkle of the vast assemblage

Poverty and Wealth.



And pro id with the pride of a millionaire.

His motto in life was, "Live while you may," And he crowded years in a single day. He bought position and name and place, And he bought him a wife with a handsome face. He journeyed over the whole wide world, But discontent in his heart lay curled Like a serpent hidden in leaves and moss, And life seemed hollow and gold was dross. He scoffed at woman, and doubted God, And died like a beast and went back to the sod.

The son of the laborer tilled the soil. And thanked God daily for health and toil. He wedded for love in his youthful prime, And two lives chorded in tune and time. His wants were simple, and simple his creed, To trust God fully: it served his need. And lightened his labor, and helped him to die With a smile on his lips and a hope in his eye. When all is over and all is done,

Now which of these men was the richer one?

Lelusions of Art Collecting.

by henri Pene Du Bois. The Recent Sale of Dom Teixeira's Collection and the Lesson it Teaches to Art Collectors.

has no art bjects, nor furniture, are reckless, affected by marks of previous but of quantity.

now. The were scattered by preciation in value of the objects that were of Shakespeare shows the forest of Titania divine landscapes; the guest in the palace recited puns in front of a curtain. This was He had, perhaps, the idea that m difference, curlosity, int rest and enthusiasm. The lesson learned may never be forgottn. wings beat and shiver in such quantity that nous scintillation.

were wealthy, the glory of Aladdin's palace. It seemed that there were not enough paint- other plaques, other clocks, other candela- most sixty cents.

They cost him a fortun They fetched much The Marquez de Agua Branca was a man one may not desire more. But one's mind At Rio de Jaheiro the Marquez saw spec- passed in review, stupidly. less than their cost to im. They fetched a of taste when he arrived in New York with quickly becomes habituated to reality, is tacles that were charming. They were comegreat deal more than heir value to those his fortune. He had education, impressions satisfied immediately by material things and dies that cost a dollar or less, or nothing, tions inundated by electric light. There were Portugal saw it dispelled a thousand times. of travels in the capitals of art, knowledge may not be satisfied by anything visible with for the dialogue and the couplets, dazzlingly clearings, landscapes, flowers, aquarlums, In the satisfied by anything visible with for the dialogue and the couplets, dazzlingly clearings, landscapes, flowers, aquarlums, In the satisfied by anything visible with for the dialogue and the couplets, dazzlingly clearings, art collectors may not gain except in this an individuality. Way did he not express If you say to a little girl, "A palace where vels and transporting the minds of the spec- display, the visitor had visions of stuffs and gotten. He is sempiternal. The art collectors

They are captivated by II the forms, by all He had the mania for art collecting. He merous as stars in the sky, or as the leaves None resisted. They saw Cinderella taken to innocent of all that. He had tried to pro- had money, but he had also knowledge of every day. They have ealized, when they to be dazzling. They were crowded. said, "Why not four hundred? Why not paintings, furniture, bronzes. ble in their quality—is not commendable ex-

OM EUGENI 3 FARIA DA TEIX- valuable-only an auction sale of them may in the Marquez's palace, but a question of ive habitations. The difference is only in roundings seemed full of pomp and dazzling sonally, without loving them really, with-ETRA, Mar uez de Agua Branca, demonstrate that. There, other art collectors art collectors art collectors art collectors art collectors. The idea was not of quality, their minds, in their dreams. And so, the decorations. Fairy spectacles evoked by the out realizing that if they were what they prisoner in the dungeon may see unroll before Marquez's palace on West End avenue were were represented to be he could not have nor paintin is by the old masters, ownership, bewildered, amazed. But the de- Poetry creates unlimited visions. A verse him the most beautiful houses and the most very different. There two or three actors obtained them.

built in a night. It was bewildering, and ings, gilt things, festoons and astragals in bra with fortuous branches? And why is the The surroundings were simple. But the self. All his years would not have made time A private art collection is insignificant if it chroniclers said so. There were rugs, por them. The Marquez would say, "You are number of the carved fyories so limited?" speciators were so interested in the love af- enough to gather the treasures that he pre- reflect not the individuality of its owner. celain, carved ivories, gilt abinets, compil- hard to please. What would you have?" A man who lives in a palace with cellings fairs of those beautiful beings, the spectators tended to collect in a day. He obtained them The Marquez de Agua Branca might have cated clocks with crystal v ces, saved from And his visitor would reply, when he was an of diamonds, with pavement of gold, and and desired so much to see them married, the because they had the descriptions of the had filled his palace, on West End avenue, the centuries.

A man who lives in a palace with centuries for those beautiful beings, the speciators centuries for the day. He obtained them made a fortune, instead of losing one, if he had filled his palace, on West End avenue, the centuries.

auction to he four winds of in- not really beautiful or precious is intense, full of sylphs, souls, gnomes, fairles. There, may perceive only an annoying and monoto- raised, and armies, Turks, elephants, Ama- art collecting, as in other things, is soverway. They are at first et ectic and insatiable, himself in his familiar surroundings? . are many dolls," she will see them as nu- tators into the enchanted world of folk lore, not of a fairy spectacle. The Marquez was whose treasures have their value at auction.

He had been deceived, he had deceived him-either in an artistic or in a business regard.

the combinations of co ors that the ages wanted his palace on West End avenue, at of trees; but, if you give her a real doll in the ball by the fairy and losing her glass duce an artistic effect, and given the best art collecting. praise. They are not cor ent until they have the door of which bronze griffins kept guard, flesh and blood, I mean in satin and sawdust, slipper, Little Red Riding Hood devoured proof of his sincerity that he knew how to objects does not teach it. Confidence in experts does not sessive it. An art collection, In their ardor, they have gone through the ble of varied colors, its stairway was of the Marquez had three hundred and fifty Prince Charming and Princess Azurine unit. He had filled his rooms with a great quantity simply echectic, reflecting the lastes of many shops and the studies, a scovering treasures rare wood carved by artists. The rooms were art objects. After counting them, the visitor ed by the god Love before an altar of wood, of art objects—three hundred in number—persons—even if the objects be irreproacha-

Now th' butcher he had ! iv Guerin-an Irlsh name don't appear to be wan ! He was wanst in th' thri is now r-runnin' a newspa people iv Fr-rance. As a circulation was larger as class than his newspaper. wanst fed an' clothed be ew man, to calls to printing the same his pa-aper th' Anti-Jew whin ye see a Jew hand jaw. 'Tis a good princi knew a mpe be the nam

ilppirery Cyc

an' miles iv sparklin' r. chrants—la belly burglary. Th' Jews has th' first down fine, but all th' rest iv th' wurruld is at home in th' wurruld, a rive flow's hours. It's second. So Jools's all r-right as far as he city in th' wurruld, a rive ition's begun. If goes, But he don't go far. ye don't believe it r-read th' 1-apers. They've Well, whin Jools hear-rd that his frind th

arrested a pote. That w all r-right, fr butcher was sloughed up he wint fairly wild Fr-rance is sufferin' fr'm 50 much pothry He says to himsilf, he says, "I'll go home," that'll scan, as Hogan s: 1, an' too much he says, "an' defy th' Gover'mint," he says. morality that won't. They ught to be a rule "I'll start a riv'lution," he says. "But," he says, "I must first notify th' polis," he says. fr th' polis to pinch anny te caught poting "so's to prevint disordher," he says. So he between th' hours ly twel an' twelve. But wint to th' chief ly polis, who was an ol' frind th' mistake th' Chief iv th olis made was to iv his-they was in th' same newspaper office r-run in a butcher at th' me time. What or thripe dairy or something—an' th' chief th' butcher'd done, I dint w, but annyhow, f'r him. "I wish," said Jools, "ye'd sind down they accused him iv war n' to pole-ax th' tin or a dozen good men in uniform an' a few gover mint, an' they thrus sim into a cell. N2 detectives in citizen's clothes," he says. "I've dend be th' name asked some ladies an' gintlemen to a five is, but this la-ad o'clock riv'lution at my house," he says, "an' us—Jools Guerin. I'd like to be sure they'll be no disordher," he business, but he says. "Well," says th' chief, "'twill not be 'like most by th' alsy," he says. "Ye see th' prisident, I f'rget ripe butcher his his name, has been asked to go to th' r-races mong a bett. " with some frinds," he says, "an' they will sin' a la-ad with prob" , thry to kill bim," he says. "We can't an' havin' been play fav'rites here," he says. "We have the low as well as th' high," he

anything happens to this man th'

An' away he wint. At sharp five o'clock th' asbestos rose in his buttonhole. 'Round his Loot Franswoo Coppere an' th' ar-rmy, fr ye anny more ridiculous than it makes it-HILE th' tl llin' scenes I'm I don't quarrel with Jools' feelin's, mind ye. riv'lution begun. Th' sthreets was dinsely waist was sthrapped four hundhred rounds whose honor ivry Fr-rencaman'll lay down siff," says he.

Tis th' histhry iv th' wurruld that th' Jews packed with busy journalists, polis, sojers an' iv ca'tridges an' eight day's provisions. He his life, th' slege will now begin. We will "Me honor is satisfied," says Jools. "Do



will not Fr-rinchmen commit again' Fr-rinch desp'rate.

"I wish," said Jools, "ye'd sind down tin or a dozen good men in uniform an' a few de- know us if ye think we can be quelled be down the Roo Chabrool, how I'd like to see a to be taken up be th' ex-prisi tectives in citizens' clothes," he says. "I've asked some ladies an' gintlemen to a five vi'lence," he says. "I have a last card," he Chicago pelisman come strollin' along the ation an' they're num'rous enough o'clock riv'lution at my house," he says, "an' I'd like to be sure they'll be no disordher," he says. "I refuse to give th' signal," he says. "But," he says

s th' best ye have," says to th' windy an' pinned a copy iv his vallyable cigareet. "Ladies an' gintlemin," he says, measures." tawthin' to do afther ye journal on th' sill—accompanied be a thrusty "I'm proud an' pleased to see ye prisint in ."Very well," says Jools, "but mark wan sixty cints iv our money, if th' Fr-rinch govhrop in," he says, "an' liftmant wavin' a statement iv th' circulation such lar-rge numbers at th' first rivitation iv thing—that if ye attempt to make me ridicu- er ment'd sind fr Jawany Shen an' ask him th us," he says. "Come iv th' Anti-Jew. Jools at this moment was a th' prisint season," he says. "With th' kind lous, ye shall suffer."

to put down this here riv ution. Th' nex' mays. "Tis an informal tur-rble sight. He was dhressed fr'm head to permission iv th' hated noise undher th' di-rec
"I assure ye, Mong Editor," says th' Gin'ral, day they'd move th' office iv th' Anti-Scenite. foot in Harveyize", bomb-proof a eel, with an tion iv me good frind an' fellow journalist carnestly," that th' government will not make Society to th' Morana.

tion," he says. "Veev l'army," he says.

"Thank ye," says Gin'ral Bellow, salutin',
"I will do me jooty. Man can do no more."

seen to be impossible because th' man that owned th' wine shop next dure, he said 'twid dhrive away custom. All th' sthreets f'r "Jools," he says, "surrinder," he miles ar-round was blockaded without effect. says. "Ye cannot longer hol' out," he mays. 'Th' fire department was called to put Jools "Ye have provisions on'y f'r eight years." out, but wather niver touched him. Th' sewer "We will remain till th' last wan it us gang wint down an' blocked th' dhrains, an' Joels soon had inspiration i'r a year's writin'.

Thin I must take sthrong measures," says At last accounts the garrison was still holding perishes ly indigestion," says Jools, th' Gia'ral. "At a given signal we will storm out bravely again' a witherin' fire ly cannot th' house, bate down th' dures, smash in th' food, lobsters, omelets, an' hams. A brave roofs cut of th' can private the formal roofs, cut off th' gas, poison th' wather suproofs, cut off th' gas, poison th' wather sup-ply, back up th' sewer, break th' windy's an' bled eggs accrost th' street without spillin a dhrop, an' is now thrainin' a ple like mother

"Do ye'er worst," says Jools, proudly, "Do ye'er worst," says Jools, proudly,
"Thin," says th' Gin'ral impressively, "if fure. It is reported that the Minister iv War these measures do not suffice, I will suspind at 4 o'clock to-morrow mornin' will dhrop a th' deliv'ry iv th' mails," he says.

th' deliv'ry iv th' mails," he says.

bundle of copies of Jools's paper through th'

"Miscreant!" ories Jools, tur-rain' white, chimbley. Whin he opens th' window a pome
"An' this called a merelful gover'mint," he be Paul Deroulede 'll be r-read to him. This says. "Mong doo;" he says, "what 3r-rimes is again th' articles iv war, but th' case is

with tears in his eyes, "we must adopt other man's head's as hard as their own. But Ta give forty-three francs, or eight dollars an'

